

## **FACT SHEET**

### **THE FEDERAL NO<sub>x</sub> BUDGET TRADING PROGRAM**

- On December 17, 1999 EPA finalized the Findings of Significant Contribution and Rulemaking on Section 126 Petitions for Purposes of Reducing Regional transport of Ozone (commonly referred to as the Section 126 final action). This rule grants petitions filed by four northeastern States (Connecticut, Massachusetts, New York and Pennsylvania) seeking to reduce ozone pollution (smog) through reductions in nitrogen oxide (NO<sub>x</sub>) emissions from other States. (See 65 FR 2673)
- The Section 126 final action requires 392 facilities in Delaware, the District of Columbia, Indiana, Kentucky, Maryland, Michigan, North Carolina, New Jersey, New York, Ohio, Pennsylvania, Virginia and West Virginia to reduce annual emissions by a total of nearly 510,000 tons from 2007 levels.
- Each affected facility will participate in a federal NO<sub>x</sub> emissions cap-and-trade program, the Federal NO<sub>x</sub> Budget Trading Program, aimed at reducing interstate ozone transport. A budget trading program is a proven and cost-effective method for achieving emissions reductions while allowing regulated sources compliance flexibility.

#### **Why did EPA choose a cap-and-trade program as its control remedy under the final section 126 action?**

When designed and implemented properly, a market-based program offers many advantages over its traditional command and control counterpart including (1) reduced cost of compliance, (2) creation of incentives for early reductions, (3) creation of incentives for emissions reductions beyond those required by regulations, (4) promotion of innovation, and (5) increased flexibility. A market system that employs a fixed tonnage limitation for a group of sources provides the greatest certainty that a specified level of emissions will be attained and maintained since a predetermined level of reductions is ensured. With respect to transport of pollution, an emissions cap also provides the greatest assurance to downwind States that emissions from upwind States will be effectively managed over time.

#### **How does the Federal NO<sub>x</sub> Budget Trading Program work?**

The Federal NO<sub>x</sub> Budget Trading Program sets emissions limits for the affected sources in the form of NO<sub>x</sub> “allowances.” One allowance authorizes the emission of one ton of NO<sub>x</sub> emissions. The EPA will allocate each source a specific number of allowances per year. Allowances may be bought, sold or traded between the affected sources and other private parties. Trading allows industry flexibility while ensuring that overall emissions are reduced. For example, if one company finds the cost of reducing emissions to be relatively low, it may be able to reduce its emissions more than required. That company then could sell or trade “allowances” it does not need to a company for which reductions would be more expensive. Sources also may receive credit for achieving reductions earlier than required and may “bank” the resulting allowances for future use.

## **Who will be participating in the Federal NOx Budget Trading Program?**

The EPA is requiring large electric utilities and large industrial boilers in States whose emissions have been shown to significantly contribute to downwind nonattainment to control their NOx emissions in response to this section 126 rulemaking. Fossil fuel fired boilers or combustion turbines that serve an electric generating unit with rated output of greater than 25 MW or that have a maximum rated heat input capacity of greater than 250 mmBtu/hr are included in the Federal NOx Budget Trading Program. Units that no longer operate or units that have a permitted limit to emit less than 25 tons of NOx during an ozone season (May 1 through September 30) are exempt from most requirements of the program. Individual units located in affected States that are not otherwise subject to the program may choose to opt into the trading program. However, once a unit opts into the program, the unit is subject to the same compliance, monitoring and reporting requirements as the units originally subject to the program.

## **How did EPA set the emissions limits for sources required to comply with the Federal NOx Budget Trading Program?**

The EPA projected total uncontrolled ozone season NOx emissions for the year 2007 for the named sources in each State. A state-wide emissions trading budget was then established by applying highly cost effective control measures to the named sources in each State. The EPA determined that a control level of 0.15 lbs/mmBtu for electric generating units and a 60% reduction in NOx emissions for industrial boilers were highly cost effective.

To set emissions limits for individual sources, EPA apportions the State trading budgets among the named sources. (As explained above, an individual source's emissions limit is expressed as the number of NOx allowances it is allocated for a given year.) In the December 17, 1999 section 126 final action, EPA allocates the State-wide budgets for 2003-2007 to sources based on their heat input and listed each unit's heat input. EPA will update these allocations every five years in five year blocks. Updated allocations will be based on output for electric generating units and probably will be based on heat input for industrial boilers. Just under 290,000 NOx allowances will be allocated in total region-wide to sources every year.

Sources that retire will continue to receive allocations until the next allocation update. If the retired sources are brought back on line after the allocation update, they are not considered new sources and will not receive an allocation until the subsequent allocation update.

During the initial two years of the program, EPA is also making available to sources an additional allowances through a compliance supplement pool. These allowances will be distributed among sources which make early reductions during the 2001 and 2002 ozone seasons. Sources may use these allowances for compliance purposes as they would other allowances for the 2003 and 2004 compliance periods. However, EPA will retire all remaining pool allowances from the allowance tracking system after the 2004 ozone season compliance determination process is completed.

**Do new sources receive allocations?**

Under the Federal NO<sub>x</sub> Budget Trading Program, new sources are allocated allowances from a portion of the State budget that is set-aside for new sources. Each year, five percent of each State's total allocations will be reserved for new sources. A new source is eligible to receive allowances from the new source set-aside until it has sufficient operating data to receive an updated allocation as an existing source. Each new electric generating unit will be allocated allowances based on the product of either a NO<sub>x</sub> emissions rate of 0.15 lbs/mmBtu or the unit's permitted limit, whichever is less, times their actual utilization for the control period. Each new non-electric generating unit will be allocated based on the product of either a NO<sub>x</sub> emissions rate of 0.17lbs/mmBtu or the unit's permitted limited, whichever is less, times their actual utilization for the control period. Sources that are not currently subject to the program but that undergo major modifications and are subsequently required to participate in the program are initially treated as new sources and therefore eligible to receive allowances from the new source set-aside. After compliance has been determined, any allowances remaining in the new source set-aside will be redistributed to existing sources.

**What are the requirements and deadlines?**

The affected sources are required to monitor beginning May 1, 2002. (See below for details.) Full compliance with the Federal NO<sub>x</sub> Budget Trading Program is required starting May 1, 2003. Sources demonstrate their compliance by holding enough allowances in their accounts to cover their ozone season emissions. If sources do not have enough allowances to cover their emissions based on their initial allocation, they may take advantage of the flexibility provided by the allowance market and buy allowances. Sources have until November 30<sup>th</sup> of each year, two months after the end of the ozone season, to ensure that they hold adequate allowances. The EPA verifies that sources hold adequate emissions allowances through standardized monitoring and reporting procedures.

**How are emissions measured and reported?**

In order to demonstrate compliance, budget sources must monitor and report their actual emissions to EPA. Under the trading program, sources with large NO<sub>x</sub> emissions must monitor using continuous emissions monitoring systems. Sources with lower NO<sub>x</sub> emissions may use simpler estimation methods. Regardless of the method used to determine emissions, the data used to support these determinations is reported to EPA electronically (by July 30 for the months of May and June, and by October 30, for the months of July August and September).

**How do I register and start trading?**

Since sources already know their initial allocations, they may begin trading immediately. However, EPA cannot record any allowance transfers in the NO<sub>x</sub> Allowance Tracking System until it records the allowance allocations in the unit accounts and authorized account representatives (AARs) have been designated. To designate an AAR, a source must complete the Account Certificate of Representation form and submit it to EPA. Individuals who wish to participate in the market, but are not named sources, may do so by filling out a general account form. In the near future, EPA plans to provide the necessary forms and additional information on its web site at: <http://www.epa.gov/acidrain/whatnew.htm>.



**How do the Federal NOx Budget Trading Program, the NOx Budget Trading Program under the NOx SIP call, and the Ozone Transport Commission's NOx Budget Program relate to one another?**

The Federal NOx Budget Trading Program is very similar to the NOx Budget Trading Program under the NOx SIP call. Both programs assume the same level of control for large electric generating units and industrial boilers and require the same compliance date. Sources trading under the Federal NOx Budget Trading Program and sources trading in the NOx Budget Trading Program under the NOx SIP call, may trade allowances freely with each other. However, under the NOx SIP call, States have the option of reducing their NOx emissions through a mechanism other than the NOx Budget Trading Program. Therefore, only the those States that choose to control their emissions through the NOx Budget Trading Program (which has some additional flexibility) can trade with sources in the Federal NOx Budget Trading Program.

Phase II of the Ozone Transport Commission's NOx Budget Program began in 1999. Phase III assumes similar control levels as the Federal NOx Budget Trading Program and the NOx Budget Trading Program under the NOx SIP call and is scheduled to begin in 2003. Because of these similarities, EPA is working with the affected States to ensure appropriate integration of the programs in 2003.